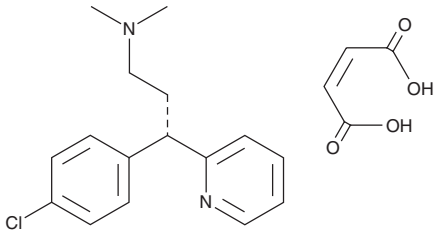
PRODUCT INFORMATION

Dexchlorpheniramine (maleate)

Item No. 24027

CAS Registry No.: 2438-32-6
Formal Name: γS-(4-chlorophenyl)-N,N-dimethyl-2-pyridinepropanamine, 2Z-butenedioate
Synonyms: d-Chlorpheniramine (maleate), S-(+)-Chlorpheniramine (maleate), Fortamine
MF: $C_{16}H_{19}ClN_2 \bullet C_4H_4O_4$
FW: 390.9
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Dexchlorpheniramine (maleate) is supplied as a solid. A stock solution may be made by dissolving the dexchlorpheniramine (maleate) in the solvent of choice, which should be purged with an inert gas. Dexchlorpheniramine (maleate) is slightly soluble in chloroform, methanol, DMSO, and dimethyl formamide.

Description

Dexchlorpheniramine is a histamine H_1 receptor antagonist with a pA_2 value of 9.36 in guinea pig ileal tissue *in vitro*.[1] It inhibits the proliferation of previously sensitized, allergen-challenged peripheral blood mononuclear cells by 92% at a concentration of 4.8 µM.[2] Dexchlorpheniramine reduces noradrenaline uptake in the rat vas deferens *ex vivo* in response to tyramine stimulation when used at a concentration of 10 µM.[3] *In vivo*, dexchlorpheniramine increases the pain threshold of mice exposed to thermal and chemical stimulation tests when administered intraperitoneally at a dose of 30 mg/kg.[4] Formulations containing dexchlorpheniramine have been used for the treatment of allergic reactions.

References

1. Shamsa, F., Ahmadiani, A., and Khosrokhavar, R. Antihistaminic and anticholinergic activity of barberry fruit (*Berberis vulgaris*) in the guinea-pig ileum. *J. Ethnopharmacol.* **64(2)**, 161-166 (1999).
2. Holen, E., Elsayed, S., and Nyfors, A. The effect of H_1 receptor antagonists on peripheral blood mononuclear cells, adenoid cells and primary cell lines. *APMIS* **103(2)**, 98-106 (1995).
3. Barnett, A., Symchowicz, S., and Taber, R.I. The effects of drugs inhibiting catecholamine uptake on tyramine and noradrenaline-induced contractions of the isolated rat vas deferens. *Br. J. Pharmacol.* **34(3)**, 484-492 (1968).
4. Farzin, D., Asghari, L., and Nowrouzi, M. Rodent antinociception following acute treatment with different histamine receptor agonists and antagonists. *Pharmacol. Biochem. Behav.* **72(3)**, 751-760 (2002).

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